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## THE GLASS INDUSTRY AND CHILD LABOR LEGISLATION

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BY CHARLES L. CHUTE.

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For many generations the glass-making industry has been a large employer of child labor. Ever since the employment of vast numbers of children as wage-earners in this country began to assume its true proportions as a most serious industrial problem, the attention of those enlisted in the campaign against injurious child labor has been frequently turned toward the glass-manufacturing industry. Not only are young boys used here in large numbers, but in the continuous work of the glass factory are still employed a great deal at night. Moreover, opposition on the part of glass manufacturers has accompanied every attempt to secure adequate child labor legislation in the glass-making states. The manufacturers have denied the necessity for such laws and opposed them openly in legislation halls. To-day there are those who contend that the laws which have been enacted to cure the evils existing within the walls of their own plants have not been successful and have wrought more harm than good.

The National Child Labor Committee, ever since it began its work in 1904, has been studying child labor in the glass industry. Following up this work a more comprehensive study of the industry was begun in the fall of 1910. The writer, pursuing graduate work at the time in Ohio State University, was engaged in the work. The investigation extended over six months. In all ninety-nine active plants, manufacturing all kinds of pressed and blown glassware, located in five of the principal glass-manufacturing states, were visited. Plants manufacturing window and other building glass were not included, as they form a separate industry employing few children. In Ohio and Illinois, where every plant in operation was visited, an especial effort was made to learn the effect of the excellent child labor laws of these two states upon the industry, the children concerned, and the community; opinions and statements from the glass manufacturers being especially sought. In Indiana, Penn-

sylvania, and West Virginia the need for similar legislation as shown in the glass-factory towns was studied. From the work done in these different states we are able to compare conditions existing under a most primitive and backward law, as that of West Virginia, with those brought about by some of the most progressive child labor laws in the Union.

What were the laws in force in these states at the time of the investigation? Briefly, Ohio and Illinois prohibited the employment of children under sixteen at night and forbade their employment over eight hours a day. In Ohio, these limitations extended to girls under eighteen. In neither Indiana, Pennsylvania nor West Virginia was there prohibition of night work above fourteen except for girls in Pennsylvania, and no limitation of hours except to ten per day. All the states except West Virginia forbade employment of children in factories under the age of fourteen. That state had practically no effective child labor law at the time of the investigation. Three of the states, Ohio, Illinois and Pennsylvania, required employment certificates carrying with them proof of age and some educational requirements for children employed under sixteen. Indiana required only a parent's affidavit of age.

The number of child workers found employed in the plants visited is of first concern. The table following gives the number and per cent of children under sixteen found regularly employed in all the plants at the time they were visited.

NUMBER AND PER CENT OF CHILDREN UNDER SIXTEEN AND TOTAL EMPLOYEES  
IN THE ESTABLISHMENTS INVESTIGATED

State	Number of glass plants visited	Total employees	Under 16 years			
			Boys	Girls	Total	Per cent
Illinois . . . . .	11	5,520	209	0	209	3.8
Ohio . . . . .	28	10,065	470	6	476	4.7
Indiana . . . . .	31	10,280	646	46	692	6.7
West Virginia . .	14	4,245	364	18	382	9.0
Pennsylvania . .	15	2,198	284	2	286	13.0
Total . . . . .	99	32,308	1,973	72	2,045	6.3

This table is given because of the significant comparison which may be made between the states. Those states having the lowest

percentage of child workers are Illinois and Ohio, the two states having most advanced and effective child labor laws. In Illinois these laws were found to be better enforced than in Ohio. The recent United States Government report on the glass industry also shows a large balance in favor of Ohio and Illinois in the proportion of children in the industry. We are forced to the conclusion that the advanced child labor laws in these two states have been a large factor in reducing child labor in the industry, a conclusion supported by opinions and testimony from very many of the best informed in those states.

We are considering Ohio and Illinois together, as their laws are similar and conditions as relating to the glass industry were found very much alike. When due allowance is made for the difficulty of strict enforcement it is found that the child labor laws in both Ohio and Illinois are being enforced fairly well. They have also been in effect long enough to show clear results. What are these results?

At all plants employers were questioned as to the effect of the child labor laws on the number of children employed. All but four of the thirty-nine plants in the two states reported a smaller number (in most cases much smaller) now than at the time the law was first enacted or at the starting of their plants, and this in spite of the fact that eighteen plants reported a decided increase in the total number of their employees. Seven plants which used many boys under sixteen in 1902 or 1903 have to-day eliminated them entirely, and two others, more recently established, use none. In these plants the mode of adjustment to the law forbidding night employment and requiring an eight-hour day has been the entire elimination of children under sixteen.

Inquiring into the effect of these laws upon the other thirty plants we find that twelve plants were violating the law and employing boys under sixteen on the night shift, but in most cases were using fewer such boys by night than by day. The remaining eighteen had adjusted themselves to the night law by employing the younger boys in the daytime only. Formerly, practically all employed in the glass house,—both boys and men,—had alternated, working one week by day and the following week by night. Now most of these plants are employing older boys and men continuously by night to take the places of the younger boys working continuously by day.

Wherever the children's eight-hour law was found to be enforced, the tendency also was toward the elimination of the younger workers. In Illinois this law was found well enforced; in Ohio, where it has not been in effect as long, enforcement was irregular, depending largely on the efficiency of district factory inspectors. However, many of the plants employing children were complying with the law, and as a consequence were sending the child workers home from half an hour to two hours sooner than the adult workers. There was much complaint of this requirement, but evidently the disadvantage is offset by the lower wages the young workers receive.

In opposition to their child labor laws many arguments were advanced by the glass manufacturers interviewed in the two states. Only three need be considered. The claim was made, (1) that the laws have crippled the industry; (2) that they have been a hardship to poor families; (3) that they have prevented boys from learning the trade.

Perhaps these objections should have been put in the future tense, as they have always been more vehemently advanced as predictions, and so are being put forth to-day. Few manufacturers in Ohio and Illinois were found who claimed that such dire results as were freely predicted when the laws were enacted, had, to any great extent, followed the enforcement of those laws and fewer still gave facts to support such a claim.

The investigation disclosed the following facts: Not a single glass plant has left either state or has failed because of these laws. Careful inquiry was made to ascertain this fact. On the other hand eight plants have moved into Ohio or Illinois from unrestricted states (Indiana or West Virginia) since the laws prohibiting night employment of children were passed, and seven other new plants have been established in these states. United States Census reports, reports of the Labor Commissioner in Ohio, and statistics taken from the Glass Trade Directory prove that the industry has had an almost continuous growth in both states during the past eight years. Most of the plants have grown and prospered and were not found to be any more handicapped for want of boys than were plants in unrestricted states.

A more important consideration is whether these laws have caused undue hardship to poor families. This claim was repeatedly

made by manufacturers, but in almost no cases by anyone else. It was denied repeatedly by school officers, poor officials, charitable society agents and others. Much more poverty was noticeable in the glass towns and among the families of boys who work in the glass factories in Indiana and West Virginia than in Ohio and Illinois. In short, every indication leads to the conclusion that the more child labor the more poverty and hardship to the poor family.

In Alton, Illinois, stands the largest glass plant in the world. Its eight great factories are running day and night, employing more than 4,000 men and boys, and turning out thousands of bottles a day. Until recently it was almost the only industry in Alton. From 200 to 400 boys under sixteen, most of them working partly at night, were employed there at the time the present Illinois child labor laws began to be enforced. When the plant was visited there were scarcely fifty boys under sixteen employed, all by day and all not over eight hours a day, although the plant is larger to-day than ever before. The use of older boys and men in the places of the little boys has been, according to officials of the plant, the chief method of adjustment to the law, although several automatic bottle-making machines, which practically do away with all labor, have been of late installed. When the present child labor law was pending in Illinois, officials of this plant fought the same and publicly stated that such a law "will drive us out of the state." To-day one of the officers of the plant when interviewed in Alton says: "When the law was passed we thought it was going to put us out of business, but we found a way out." So much for the law's effect upon the industry.

The town of Alton, at the time of the many raids upon this plant which led up to the strict law enforcement of to-day, was full of poor families, existing it would almost seem, only through the labor of their young boys in the glass plant. These boys were turned out. There was little other work. For a short time there was suffering in that town. But adjustment was made. Public and private relief, ineffective before, was organized. A larger number of men were employed at the plant and the boys were sent to school. To-day there is less poverty, by far, than before the law was passed, the old importation of poor families from the country districts to secure the boys for the factory has entirely ceased, and nearly everyone in Alton agrees that the child labor laws have been of great benefit to that community.

The third objection to the laws, though commonly made by certain manufacturers, was effectively answered by other manufacturers and by the facts themselves. The claim is made that the laws hinder boys from learning the glass-blowing trade. What there is so peculiar in the art of glass-blowing that boys of sixteen or over cannot acquire it at the same age that they acquire nearly all other skilled trades, one is unable to see. The fact remains that boys *are* learning this trade in Ohio and Illinois to-day who never entered the glass house till they were sixteen or over. It is a further significant fact that there are to-day many more glass-blowers in the country than can possibly find work. One is inevitably led to believe that the real reason for this unsubstantiated claim is that these manufacturers desire to continue to exploit the small boys, not at learning any trade, but at the monotonous drudgery of glass factory work.

We may mention briefly two further results of these laws in Ohio and Illinois. According to enthusiastic testimony by nearly all school superintendents and teachers interviewed in the glass towns, school attendance has been largely increased by the laws. In twenty-seven glass factory towns out of a total of thirty-two, in which the facts were obtained, the superintendent of schools or other school official reported an increased school attendance due to these laws. In several towns very definite figures were given to prove this. For instance, in the city of Bellaire, Ohio, which contains three large glass plants, the superintendent of schools reported a gain in school enrollment of 291 pupils in the past three years, while the school enumeration had remained practically stationary. He said: "This increase has practically all been in the upper grades and is largely due to the enforcement of these laws."

The laws are now very popular among all classes in these states. It was nowhere shown that the laws had increased idleness, or been anything but a benefit. As one prominent glass man put it, "We shall never go back to the old days."

In contrast with the progress of Ohio and Illinois are some conditions found in the more backward states. The table given has shown a larger percentage of child labor in Indiana, West Virginia and Pennsylvania plants. Younger children were also, in general, found employed in these states. The great majority of the young boys employed in the glass factories of these states, unlike Ohio

and Illinois, were found to be working on the night shift and, in most cases, were alternating every week, sleeping one week by night, the next by day. All but eleven of the 646 boys under sixteen who were found to be regular wage-earners in Indiana glass factories were so employed.

The injury of this night employment and especially of the alternating shift system is too well established to need proof. Much additional evidence and testimony were added by this investigation. In the two leading glass towns of West Virginia, Wheeling and Fairmont, strong letters, testifying to the injury of night work under sixteen were secured from nine prominent physicians and others were secured in Indiana. The evils of the system are to be seen in the home study which was made of forty-eight boys in the three states through which the facts which follow were brought out. Young boys slept in the factory or hung around until morning in ten cases. These night workers commonly finished their labor at about 3 A. M. Many were very irregular in meal hours and hours of sleep. Mothers complained in a number of cases that already the hard and unnatural conditions and hours of work had stunted, weakened and permanently injured their boys.

Proper enforcement of Indiana's laws is still impossible through the antiquated affidavit system. The results of allowing children to work on a simple affidavit of age from a parent or guardian are shown in the following figures. Fifteen of the thirty-one factories visited were found to be employing children under fourteen; thirty-five children so employed being actually found and scheduled. Thirteen of these were found working under false or perjured affidavits, and twenty-two with no affidavits. This is, however, a very incomplete list. All agreed, even the manufacturers, that false affidavits were commonly resorted to by unscrupulous parents.

In West Virginia, as already stated, the law at the time of the investigation amounted to but little and the enforcement to less. Eight of the fourteen plants visited were employing boys under fourteen, forty-two cases being scheduled. A number of boys of nine, ten, and eleven years of age were found at work, mostly at night. It was found that permits, oral or written, were being given out by the Commissioner of Labor himself, allowing boys to leave school and go to work in the factories.

In consequence of backward laws and lax enforcement the



schools in these states suffer greatly. Two evils were commonly reported by the school people:

(1) Many children leave school the very day they reach fourteen if they do not contrive to do so before.

(2) School boys are permitted to work in the glass plants to the manifest detriment of their school work.

Both of these evils were found much less prevalent in Ohio and Illinois than in the other three states. Stricter laws and better enforcement of law account for this.

In Indiana and West Virginia this employment of school boys was particularly inquired into, the schedules showing the following facts:

INDIANA AND WEST VIRGINIA GLASS FACTORIES

	During vacation	During school term
Plants using school boys	40	34
Plants not using school boys .....	4	10
Unknown .....	1	1
Total.....	45	45

The number used by these plants, of course, varied greatly, but frequently was found to be large. That this is a very great evil in many localities was repeatedly affirmed by school authorities. Such employment is frequently illegal, boys of ten or under being sometimes used. Such boys are undoubtedly injured by the work, and in addition their schooling is interfered with. The impossibility of any young boy working at night until 3 A. M. and doing well in school the next day is apparent.

In the glass towns of West Virginia, Indiana and Pennsylvania there is much more poverty apparent than in the other two states. There is less efficient public and private relief; school authorities give little or no material help to children in the poorer families as they do in Ohio. The question arises,—would stricter child labor laws lessen or intensify these evils? We believe they would lessen them in the end, as they have in Ohio and Illinois. Relief would be organized and more largely given, work would be taken from those unfit to bear the burden and transferred to the shoulders of

fathers and older brothers, who would be paid higher wages than they are now getting. "A nice theory," say some, but it is much more than a theory to-day in states which have tried this remedy. The infamous importation of miserably poor families from the country districts and from other states to recruit the supply of "small help," a very common practice still, especially in Indiana, would be done away with as it has been largely in Ohio and Illinois.

From this investigation of the glass industry in five states the following conclusions may be drawn:

(1) The child labor laws have been successful and have already justified themselves in those states which have the most advanced laws. Scarcely any except the manufacturers, whose pecuniary interests have suffered, temporarily perhaps,—and a decreasing number even of these—deny this.

(2) The industry in these states has not suffered, but has thrived and grown.

(3) The families of the poorer workers have not been injured, but on the contrary poverty has been lessened.

(4) Children have been transferred from the factory to the school, and many communities have been benefited thereby.

(5) The need for uniform advanced laws and for their enforcement is clearly shown by the inferior conditions found in the backward states.

Progress is, however, being made, and the backward states are coming up to the standard of the more progressive. Following this investigation campaigns were waged in three states, and long steps in advance have been taken in two. Indiana has prohibited night work for children under sixteen and provided for them a maximum working day of nine hours. West Virginia has prohibited at all times the employment of children under fourteen in manufacturing, and has introduced the employment certificate. In Pennsylvania a bill, which would have brought that state up to the standard of the most progressive by forbidding night work under sixteen was defeated largely by the efforts of the glass manufacturing interests. Only Pennsylvania and West Virginia, among the seven great glass manufacturing states, still allow the employment of children under sixteen at night.

Surely it is a reasonable standard that has been set in Ohio, Illinois and many other progressive states, which prohibits the

entrance of children upon the wage-earner's long and arduous life below the age of fourteen and guarantees to those who must begin before they are sixteen the minimum protection of an eight-hour workday and no night work.

That the securing of such progressive laws in all states will solve the problems of poverty and children's wrongs which are demanding solution in this country to-day, we do not pretend to claim. But this, we believe, the present study has helped to demonstrate anew, that the elimination of children from unsuitable employment works immediate good to all concerned, and that by the building up of more efficient and noble citizenship the future will show increased returns.